

## REMARKS

In accordance with the foregoing, claims 1-15 have been amended. Claims 1-15 are pending and under consideration.

### Rejections under 35 U.S.C § 101

On pages 2 and 3 of the Office Action mailed September 29, 2006 claims 1-15 were rejected under 35 U.S.C § 101. The Office Action stated in the last paragraph on page 3, "[c]laims that only generate classes and subclasses from a super class are not statutory. A result that is a practical application is required." The Office Action did not support its broad assertion that generating classes and subclasses from a super class is not statutory and the Applicants submit that support for this assertion cannot be found, in case law or even the MPEP. Due to the lack of support for the requirements on page 3 of the Office Action, the § 101 rejection is improper.

Furthermore, even if the test set forth on page 3 of the Office Action is applied, claims 1-15 recite statutory subject matter. The Office Action asserted that there was no practical application that included "transforming ... [a] physical thing ... or hav[ing] the FINAL RESULT ... achieve or produce a useful ..., concrete ..., AND tangible ... result" (Office Action, page 3, lines 9-13) recited in the claims. Contrary to this assertion, claims 1, 6 and 11 all recite transforming a physical thing by "storing in a database" (claim 1, line 7 and claims 6 and 11, line 5).

Furthermore, the method performed upon execution of the program encoded on the computer readable medium recited in claim 1 ends by "configuring the product's hierarchical structure from information stored in the database and the relationship between the components obtained by the inference." The preamble of claim 1 recites "a knowledge processing system formed by a product's hierarchical structure of its components information" (claim 1, lines 3-4) and the first operation recited in claim 1 is "storing in a database the product's development code name as a super class having a name inclusively describing a component as a class of the component information ..." (claim 1, lines 7-8). Thus, "configuring the product's hierarchical structure" as recited at the end of claim 1 requires a physical change in the data stored in the database.

It is submitted that making changes in a database is a practical application, as databases are widely used in the real world for many purposes. The statements at page 3, lines 5-7 of the Office Action that specific uses, such as "automotive repair" or "medical diagnoses" must be

recited adds a requirement for a narrowly recited practical application that is not found in the law or MPEP § 2106.

Furthermore, claim 11 is directed to a system which includes "a storage unit" (claim 11, line 5) and "an inference unit ... detecting a class ... generating a relationship between the components by an inference based on multivalued logic, and configuring a knowledge structure from information stored in the database ..." (claim 11, lines 9-11). It is clear from the specification, that "the relationship between new classes obtained as a result of the inference by a computer can be a part of the knowledge structure" (application, page 9, lines 2-4); thus, the "inference unit" (claim 11, line 9) of a "components information processing system" (claim 1, line 1) should be interpreted as "a personal computer, a work station, etc." (application, page 2, lines 11-12). The rejection under 35 U.S.C § 101 did not cite any reason why a system comprising hardware that includes a storage unit and a personal computer is not statutory subject matter.

For the above reasons, it is submitted that claims 1, 6 and 11, as well as claims 2-5, 7-10 and 12-15 which depend therefrom, are directed to patentable subject matter.

#### **Rejections under 35 U.S.C § 112**

On page 4 of the Office Action claims 4, 9 and 14 were rejected under the second paragraph of 35 U.S.C. § 112 for use of the terms "change with time" and "taken into account" as recited, for example on lines 3-4 of claim 4. The Office Action referred to the lack of specificity regarding "the length of the window of time" and the non-existence of a "taken into account" algorithm" (Office Action, page 4, lines 10-11). It is submitted that the level of specificity required in the Office Action is not required by the second paragraph of 35 U.S.C § 112.

As amended, the last 3 lines of claim 4 recites "a relationship between components changing over time with described component's information taken into account, is included in the component's information structure" and similar limitations are now recited in claims 9 and 14. It is submitted that this limitation is a proper broad recitation of the component's information structure. As stated in the title of section 2173.04 of the MPEP, "Breadth Is Not Indefiniteness" and, therefore, withdrawal of the rejection is respectfully requested.

#### **Rejections under 35 U.S.C. 102(b)**

On pages 4-7 of the Office Action, claims 1-15 were rejected under 35 U.S.C. § 102(b) as being anticipated by an article by Osawa entitled, "Generation and Evaluation of Glyphs Representing Superclass-subclass relationships", in an IEEE publication published in 2000 that was identified only by the ISBN number 0-7695-0840-5. It is assumed that the article was

published in the Proceedings of the 2000 IEEE International Symposium on Visual Languages. If Osawa continues to be used in rejecting the claims, the Examiner is respectfully requested to confirm this assumption.

Osawa disclosed glyph representations of classes (Abstract, lines 1-3), but is not enabling with respect to any element recited in the computer readable medium, method or system recited in any of claims 1-15. As stated in section 2121.01 of the MPEP, "[t]he disclosure in the assertedly anticipating reference must provide an enabling disclosure of the desired subject matter, merely naming or description [*sic*] of the subject matter is insufficient, if it cannot be produced without undue experimentation" (quoting from *Elan Pharm., Inc. v. Mayo Found. For Med. Educ. & Research*, 346 F.3d 1051, 1054). For example, "inference by multivalued logic", recited in lines 10-11, was cited as being anticipated by "initiator (starting symbol)" and "generator (rewriting rule)" of Osawa. The generator in Osawa was further described as a triangular shape on page 82, column 1, line 2. Nothing in Osawa has been found that would allow one skilled in the art to construct an "inference by multivalued logic" from a starting symbol and a triangular shape without undue experimentation. Therefore, it is submitted that claims 1-15 are not anticipated by Osawa and withdrawal of the prior art rejections is respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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